(b) [Reserved]

§ 162.039–2 Classification.

(a) Every semiportable fire extinguisher shall be classified as to type and size as specified in § 76.50–5 (Subchapter H—Passenger Vessels) of this chapter.

(b) [Reserved]

§ 162.039–3 Requirements.

(a) *General.* Every semiportable fire extinguisher shall conform to the requirements for listing and labeling by a recognized laboratory and shall be of such design, materials, and construction as to meet the requirements specified in this section.

(b) *Design.* Every semiportable extinguisher shall be fitted with hose of sufficient length to a nozzle or nozzles to provide for suitable application of the extinguishing agent to any part of the space protected (a length of pipe may connect the outlet of the supply to the hose connection); shall weigh more than 55 pounds when fully charged; shall be self-contained, i.e., when charged, it shall not require any additional source of extinguishing agent or expellent energy for its operation; and shall provide simple means for immediate operation by a single operator. The design, materials and construction shall provide reliability of operation and performance after non-use for long periods under conditions encountered in marine service.

(c) *Materials.* Materials used for exposed working parts, except those used for inversion mechanism or similar purposes, shall be corrosion-resistant to salt water and spray. Materials used for other exposed parts shall be either corrsion-resistant or shall be protected by a suitable corrosion-resistant coating.

(1) *Corrosion-resistant materials.* The materials which are considered to be corrosion-resistant are copper, brass, bronze, certain copper-nickel alloys, certain alloys of aluminum, certain plastics, and certain stainless steels.

(2) *Corrosion-resistant coatings.* (i) The following systems of organic or metallic coatings for exposed nonworking ferrous parts except for ICC cylinders, when applied on properly prepared surfaces after all cutting, forming, and bending operations are completed, are considered to provide suitable corrosion resistance:

(*a*) Bonderizing, followed by the application of zinc chromate primer, followed by one or more applications of enamel; or,

(*b*) Inorganic zinc coatings; or,

(*c*) Hot-dipped or electrodeposited zinc in thicknesses not less than 0.002 inch; or,

(*d*) Electrodeposited Cadmium in thicknesses not less than 0.001 inch; or,

(*e*) Hot-dipped or sprayed aluminum in thicknesses not less than 0.002 inch; or,

(*f*) Copper plus nickel in total thicknesses not less than 0.003 inch, or which the nickel is not less than 0.002 inch, plus any thickness of chrome.

(ii) The metallic platings of less than the thicknesses specified in this paragraph are not acceptable for the protection against corrosion of ferrous parts.

(3) *Decorative platings.* Decorative platings in any thicknesses applied over corrosion-resistant materials and corrosion-resistant coatings are acceptable for either working or nonworking parts.

(4) *Dissimilar metals.* The use of dissimilar metals in combination shall be avoided wherever possible, but when such contacts are necessary, provisions (such as bushings, gaskets, or o-rings) shall be employed to prevent such deleterious effects as galvanic corrosion, freezing or buckling of parts, and loosening or tightening of joints due to differences in thermal expansion.

(5) *Suitability of materials.* In event of question as to the suitability of the materials (including coatings) used, the salt spray test described in paragraph (c)(6) of this section shall be conducted.

(6) *Salt spray test.* Expose either component parts, subassemblies, or the complete fully charged specimen extinguisher to a 20 percent sodium-chloride solution spray at a temperature of 95 °F. (35 °C.) for a period of 240 hours. The procedures and apparatus described in Method 811 of Federal Test Method

Standard No. 151 are suitable. Alternate methods may be found satisfactory if the results are comparable. Following the test, allow the specimen extinguisher to air dry for a period of 48 hours. Following the air drying, the specimen extinguisher shall be capable of being operated satisfactorily without undue effort or special procedures on the part of the operator, and it shall be capable of being recharged satisfactorily in accordance with the directions on the nameplate without the use of extraordinary tools or procedures.

(d) *Gauges.* Every pressure gauge used on a semiportable fire extinguisher shall have an accuracy of at least 2 percent of the scale range for the middle half of the scale conforming to ASME Grade B commercial accuracy. The gauge when new shall be watertight, i.e., with the connection capped or plugged, no water shall penetrate to the interior of the case during submergence 1 foot below the surface of water for a period of 2 hours. The gauge shall be constructed of corrosion-resistant materials, so that the pointer or face lettering will not be obliterated by the action of salt water if some leakage should occur after rough handling or extended periods of service. The gage, when attached to the extinguisher, shall pass the salt spray and vibration tests prescribed by paragraphs (c)(6) and (e) of this section.

(e) *Vibration resistance.* Either component parts, subassemblies, or the complete, fully charged specimen extinguisher, shall be tested in accordance with sections 3.1 through 3.1.4.4 of Military Standard MIL–STD–167. Following this test, there shall be no obvious failures of parts or assemblies, and they shall be capable of being operated satisfactorily without undue effort or special procedures on the part of the operator, and the extinguisher shall be capable of being recharged satisfactorily in accordance with the directions on the name plate without the use of extraordinary tools or procedures.

(f) *Carbon dioxide type.* Every carbon dioxide type extinguisher shall be fitted with a valve which will withstand a minimum bursting pressure of 6,000 p.s.i., and a discharge hose or tube which will withstand a minimum bursting pressure of 5,000 p.s.i. The hose shall be constructed with either a wire braid or other conducting material for conducting static charges occurring at the discharge nozzle back to the body of the extinguisher.

(g) *Chemical-foam type.* Every chemical foam type semiportable fire extinguisher shall have a nozzle which will provide operating characteristics such that when it is held about 3 feet above the ground at an elevation of approximately 30°, and with the extinguisher and contents both at approximately 70 °F. and 120 °F., the range of the stream shall not exceed 40 feet, and the major portion of the discharge shall fall between 20 and 40 feet, measured horizontally, from the nozzle. The duration of the effective discharge shall be between 2.5 and 4.0 minutes, effective discharge being considered as occurring while the major portion of the discharge falls beyond 10 feet, measured horizontally, from the nozzle.

(h) [Reserved]

(i) *Toxic extinguishing agents.* Every semiportable fire extinguisher shall contain only agents which qualify for the Underwriters' Laboratories, Inc., toxicity rating of Group 5 or Group 6, and which in normal fire extinguishing use do not generate decomposition products in concentrations hazardous to life. Acceptance of extinguishing agents under these requirements will be determined by the Coast Guard.

(j) *Fire tests.* Fire tests may be employed in determining the suitability for ''marine type'' listing and labeling.

(k) *Additional tests.* Every semiportable extinguisher may be additionally examined and tested to establish its reliability and effectiveness in accordance with the intent of this specification for a ''marine type'' semiportable fire extinguisher when considered necessary by the Coast Guard or by the recognized laboratory.

(l) *Additional marking.* (1) As part of the usual nameplate marking, there shall be included the rated capacity of the extinguisher in gallons, quarts, or pounds, and complete instructions for recharging, including the identification of the recharge materials and of the pressure containing cylinder or separate container if one is used.

(2) Pasted-on type paper or decalcomania labels are not acceptable for any of the required extinguisher marking.

(3) Recharge packages shall be legibly marked with the name of the recharge and the capacity of contents in gallons, quarts, or pounds in addition to the usual recharge package marking. Recharge pressure containing cylinders shall, in addition to the usual marking, also be plainly marked to show the distinctive identifying designation of the cylinder.

(m) *Securing means.* Every semi-portable fire extinguisher shall be supplied with a suitable means for holding the extinguisher securely in its stowage location on vessels or boats. The materials shall be sufficiently corrosion-resistant or protected against corrosion to withstand the test prescribed by paragraph (c)(6) of this section without showing more than traces of slight corrosion, which may be easily wiped off after rinsing with tapwater.

[CGFR 65–9, 30 FR 11487, Sept. 8, 1965, as amended by CGFR 65–64, 31 FR 563, Jan. 18, 1966; CGD 73–73R, 38 FR 27354, Oct. 3, 1973; CGD 77–039, 44 FR 34133, June 14, 1979]

§ 162.039–4 Marine type label.

(a) In addition to all other marking, every semiportable extinguisher shall bear a label containing the ''marine type'' listing manifest issued by a recognized laboratory. This label will include the classification of the extinguisher in accordance with the Coast Guard classification system, and the Coast Guard approval number, thus: ''Marine Type USCG Type ___, Size ___, Approval No. 162.039/Ex__.'' All such labels are to be obtained from the recognized laboratory and will remain under its control until attached to product found acceptable under its listing and labeling program.

(b) [Reserved]

§ 162.039–5 Recognized laboratory.

(a) A recognized laboratory is one which is regularly engaged in the examination, testing, and evaluation of semi-portable fire extinguishers; which has an established factory inspection, listing, and labeling program; and which has special standards for listing and labeling as a ''marine type'' semiportable fire extinguisher acceptable to the Commandant as approved for use on merchant vessels and motorboats. The following laboratories are recognized, and the semiportable fire extinguishers bearing their ''marine type'' labels are approved for use on merchant vessels and motorboats:

(1) Underwriters' Laboratories, Inc., mailing address: Post Office Box 247, Northbrook, Ill., 60062.

(2) [Reserved]

(b) [Reserved]

§ 162.039–6 Examinations, tests, and inspections.

(a) Full examinations, tests, and inspections to determine the suitability of a product for listing and labeling, and to determine conformance of labeled product to the applicable requirements are conducted by the recognized laboratory. Whenever any work is being done on components or the assembly of such product, the manufacturer shall notify the recognized laboratory in order that an inspector may be assigned to the factory to conduct such examinations, inspections, and tests as to satisfy himself that the quality assurance program of the manufacturer is satisfactory, and that the labeled product is in conformance with the applicable requirements.

(b) Manufacturers of listed or labeled marine type semiportable fire extinguishers shall maintain quality control of the materials used, manufacturing methods, and the finished product so as to meet the applicable requirements, and shall make sufficient inspections and tests of representative samples of the extinguishers and various components produced to maintain the quality of the finished product. Records of tests conducted by the manufacturer shall be made available to the laboratory inspector or to the Coast Guard marine inspector, or both, for review upon request.

(c) Followup check tests, examinations, and inspections of product listed and labeled as a ''marine type'' semiportable fire extinguisher acceptable to the Commandant as approved for use on merchant vessels and motorboats may be conducted by the Coast Guard, as well as by the recognized laboratory.